COLORADO RIVER RECOVERY PROGRAM FY-2008-2009 PROPOSED SCOPE-OF-WORK for:

White sucker control in the middle Green River – pilot study

Lead Agency: UDWR and USFWS

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Category:	Expected Funding Sources:	
Ongoing project	X_Annual funds	
Ongoing-revised project	Capital funds	
Requested new project	Other (explain)	
X Unsolicited proposal		
I. Title of Proposal:		
White Sucker Control in the Green River		

II. Relationship to RIPRAP:

GENERAL RECOVERY PROGRAM SUPPORT ACTION PLAN

III. Reduce negative impacts of nonnative fishes and sportfish management activities (nonnative and sportfish management).

Project No.: XXX

- III.A. Reduce negative interactions between nonnative and endangered fishes.
- III.A.1.C.1 Implement actions to minimize hybridization between white sucker and razorback sucker.
- III.A.2. Identify and implement viable active control measures.

GREEN RIVER ACTION PLAN: MAINSTEM

- III. Reduce impacts of nonnative fishes and sportfish management activities (nonnative and sportfish management).
- III.A.4. Develop and implement control programs for nonnative fishes in river reaches occupied by the endangered fishes to identify required levels of control. Each control activity will be evaluated for effectiveness, and then continued as needed.

III. Study Background/Rationale and Hypotheses:

The Upper Colorado River Endangered Fish Recovery Program has determined that control of nonnative fish in the upper Colorado River Basin is essential to the recovery of the four endangered fish species: Colorado pikeminnow, razorback sucker, humpback chub, and bonytail. This determination has been documented specifically for razorback sucker in Section 4.3.2 of the Razorback Sucker (*Xyrauchen texanus*) Recovery Goals (USFWS 2002). No catch information has been collected for adult white sucker, as they are not yet a target species for the Program; however, according to middle Green River young-of-year (YOY) Colorado pikeminnow sampling, abundance of YOY white sucker increased in the Green River over the 2003 to 2005 sampling period. In addition, the species is known to hybridize with razorback sucker, in addition to flannelmouth and bluehead sucker. Because of the high risk to native species, this species should be actively controlled in the Green River.

IV. Study Goals, Objectives, End Product:

Goal: Control white sucker populations in the Green River.

Objectives:

- 1. Implement white sucker removal during three species sampling on the middle Green River from Split Mountain (RM 318) to the White River (RM 246).
- 2. Remove white sucker in the Green River from Echo Park (RM 344) to the White River (RM 246) as incidental catch during smallmouth bass removal efforts.
- 3. Determine efficiency of white sucker removal efforts and evaluate the need for additional removal passes and/or a population estimate.
- 4. Evaluate white sucker removal trends over multiple years to determine whether removal efforts are having an effect on white sucker populations.

V. Study Area

The study area encompasses the Green River from Echo Park (RM 344) to the White River (RM 246). The USFWS will remove white sucker and smallmouth bass from Echo Park (RM 344) to Split Mountain boat ramp (RM 318), a total of 26 miles. UDWR – Vernal will remove white sucker and smallmouth bass from Split Mountain boat ramp (RM 318) to the White River (RM 246), a total of 72 miles.

VI. Study Methods/Approach

White sucker will be removed primarily by electrofishing. Sampling crews will conduct removal activities in a manner that minimizes potential negative impacts to endangered fish as a result of electrofishing activities. This includes discontinuing electrofishing when elevated numbers of endangered fish are known to be present. Situations when this is likely to occur will be when Colorado pikeminnow are staging in tributary mouths or backwater habitats prior to spawning, when razorback sucker are on and near the spawning bar and following recent stocking of endangered fish.

UDWR Vernal will conduct one electrofishing pass as part of their three species sampling in June or July of 2008 and 2009. This effort will require collection of all suckers and roundtail chub from Split Mountain to the White River, gathering length and weight measurements for each, PIT tagging the native fish and returning all natives to the river. All white sucker and white sucker x native sucker hybrids will be removed from the river. Two electrofishing boats will simultaneously electrofish each shoreline of the river looking for all suckers and roundtail chub. Effort will be consistent throughout the entire stretch. Any endangered fish captured will be scanned for a PIT tag, tagged if needed, weighed (g), measured TL (mm), and released alive.

In addition, both USFWS and UDWR Vernal will remove white sucker from the Green River as incidental catch during the smallmouth bass removal effort. This species will not be the focus of the removal effort and will thus not take away from smallmouth bass removal efforts. All white sucker will be captured, measured, and terminated according to the white sucker nonnative removal plan for the State of Utah.

White sucker removal will be evaluated during the FY2008 and FY2009 nonnative removal workshop to determine whether more effort is required to adequately remove white sucker from the spawning population of suckers in the middle Green River.

VII. Task Description and Schedule

- Task 1. One white sucker collecting pass from Split Mountain boat ramp to the White River (UDWR Vernal; June or July 2008 2009).
- Task 2. White sucker incidental take during the smallmouth bass removal passes (USFWS CRFP Vernal, UDWR Vernal; July October 2008-2009).
- Task 3. Data entry, analysis, and reporting October/November 2008-2009

VIII. FY2008 Work

Deliverables/Due Dates

Recovery Program annual progress report: November 2008

Budget:

This scope of work, as written, will not require additional funds. The one removal pass done by UDWR Vernal will be funded through ESMF/SWG funds for work on the three species. The remainder of the work will be completed incidentally through the smallmouth bass removal scope of work and will thus not require additional funding.

IX. Program Budget Summary

	UDWR-Vernal	USFWS	Total
FY 2008	\$0	\$0	\$0.00
FY 2009	\$0	\$0	\$0.00

X. Reviewers

XI. References